

011537



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D206-667-203
Job Sheet 197723



Part No: D206-667-203

Job Qty: 1 pcs

Part Name: Aft Crosstube - High 206L / L1 / L3 / L4



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/15/19

Job Tracking No:

Due Date: 8/16/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG D206-667-243 REV.D/ IIN-D206-667 REV.D IPP Rev:F 05.09.01 Add holes for compatibility with Bell Skidtubes KJ/JLM IPP Rev:G 08-06-03 update as per DSI9415 (ECN1198) DD verified by:ec IPP Rev:H 08-07-18 remove thread masking in step 12 DD verified by:EC IPP Rev:I 08-12-15 add magnobond DD verified by:EC IPP Rev J 09.01.06 ECN 08-562 EC verified by:DD IPP REV:K 11.08.05 PER ECN 11-615 DD VERF:EC IPP REV:L 18.09.13 AS PER DWG REV.D DD VERF:JF

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
110	Crosstubes - Bend - 1	1 pcs	8/16/19	8/16/19	0.50	1.54	Crosstubes - Bend	BB/SP 7/17/2019
120	QC 15	1 pcs	8/16/19	8/16/19	0.00	0.00	QC 15 - 12	
							QC 15 - 3	
							QC 15 - 47	
							QC 15 - 49	
							QC 15 - 58	
							QC 15 - 9	
							QC 15 - 68	
130	Crosstubes - 2 - B4B	1 pcs	8/16/19	8/16/19	0.00	1.00	Crosstubes - 1 - B4B	
							Crosstubes - 2 - B4B	HP 19-08-09
							Crosstubes - 3 - B4B	
							Crosstubes - 4 - B4B	
135	Crosstubes - 3 - B4B	1 pcs	8/16/19	8/16/19	0.00	0.25	Crosstubes - 1 - B4B	
							Crosstubes - 2 - B4B	GP 19-08-09
							Crosstubes - 3 - B4B	
							Crosstubes - 4 - B4B	
140	QC 5	1 pcs	8/16/19	8/16/19	0.00	0.00	QC 5 - 10	
							QC 5 - 12	
							QC 5 - 17	
							QC 5 - 18	
							QC 5 - 19	
							QC 5 - 22	
							QC 5 - 24	
							QC 5 - 3	

D206-667-203/197723/S198520

142 QC 7	1 pcs	8/16/19	0.00 0.00	QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
				QC 7 - 10	
				QC 7 - 13	
				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	
				QC 7 - 9	
				QC 7 - 68	
				QC 7 - 50	
				QC 7 - 67	
				QC 7 - 40	
				QC 7 - 24	
				QC 7 - 43	
				QC 7 - 61	
				QC 7 - 81	
170 Outsource - 2 - NDT per QSI038	1 pcs	8/16/19		SKY002-VC	
180 Packaging 2-1 - Receive - B4B	1 pcs	8/16/19	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	

					Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
					Packaging 2 - 27 - B4B	
					Packaging 2 - 28 - B4B	
					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
190 QC 5	1 pcs	8/16/19	0.00 0.00	QC 5 - 10		
				QC 5 - 12		
				QC 5 - 17		
				QC 5 - 18		
				QC 5 - 19		
				QC 5 - 22		
				QC 5 - 24		
				QC 5 - 3		
				QC 5 - 43		
				QC 5 - 49		
				QC 5 - 51		
				QC 5 - 58		
				QC 5 - 68		
				QC 5 - 9		
				QC 5 - 50		
				QC 5 - 30		
QC 5 - 40	AUG 14 2019 40					
QC 5 - 61	9-89					
QC 5 - 81						
200 Spray Paint - 2 - B4B	1 pcs	8/16/19	0.00 0.25	Spray Paint - 1 - B4B	19-8-15	
				Spray Paint - 2 - B4B		
				Spray Paint - 3 - B4B		
				Spray Paint - 4 - B4B		
210 QC 14	1 pcs	8/16/19	0.00 0.00	QC 14 - 15		
				QC 14 - 2		
				QC 14 - 34		
				QC 14 - 41		
				QC 14 - 51		
				QC 14 - 58		
				QC 14 - 59		
				QC 14 - 9		
				QC 14 - 68	AUG 16 2019 68	
				QC 14 - 40	9-89	
				QC 14 - 19		
				QC 14 - 43		
				QC 14 - 24		
				QC 14 - 61		
				QC 14 - 81		
				220 Crosstubes - 4 - B4B	1 pcs	8/16/19
Crosstubes - 2 - B4B						
Crosstubes - 3 - B4B						
Crosstubes - 4 - B4B	RD 19-8-17					
240 QC 5	1 pcs	8/16/19	0.00 0.00	QC 5 - 10		

Plex 7/15/19 3:48 PM Dart.lajeunesse.marie

				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	DAS AUG 20 2019 68 9-89
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
250	Packaging 1-1 - Pick Kit - B4B	1 pcs	8/16/19	0.00 0.00	Packaging 1 - 1 - B4B
					Packaging 1 - 2 - B4B
					Packaging 1 - 3 - B4B
					Packaging 1 - 4 - B4B
					Packaging 1 - 5 - B4B
					Packaging 1 - 6 - B4B
					Packaging 1 - 7 - B4B
					Packaging 1 - 8 - B4B
					Packaging 1 - 9 - B4B
					Packaging 1 - 10 - B4B
					Packaging 1 - 11 - B4B
					Packaging 1 - 12 - B4B
					Packaging 1 - 13 - B4B
					Packaging 1 - 14 - B4B
					Packaging 1 - 15 - B4B
					Packaging 1 - 16 - B4B
					Packaging 1 - 17 - B4B
					Packaging 1 - 18 - B4B
					Packaging 1 - 19 - B4B
					Packaging 1 - 20 - B4B
					Packaging 1 - 21 - B4B
					Packaging 1 - 22 - B4B
					Packaging 1 - 23 - B4B
					Packaging 1 - 24 - B4B
					Packaging 1 - 25 - B4B
					Packaging 1 - 26 - B4B
					Packaging 1 - 27 - B4B
					Packaging 1 - 28 - B4B
					Packaging 1 - 29 - B4B
					Packaging 1 - 30 - B4B
					Packaging 1 - 31 - B4B
					Packaging 1 - 32 - B4B
					Packaging 1 - 33 - B4B
					Packaging 1 - 34 - B4B
					Packaging 1 - 35 - B4B
					Packaging 1 - 36 - B4B
260	QC 4	1 pcs	8/16/19	0.00 0.00	QC 4 - 28
					QC 4 - 58
					QC 4 - 69
					QC 4 - 9
					QC 4 - 46
					SMB 19/10/24
					Plex 7/15/19 3:48 PM Dart.lajeunesse.mari

270	Packaging 3-1 - Stock - B4B	1 pcs	8/16/19	0.00	0.00	QC 4 - 68	
						QC 4 - 72	
						QC 4 - 74	
						QC 4 - 75	
						Packaging 3 - 1 - B4B	
						Packaging 3 - 2 - B4B	
						Packaging 3 - 3 - B4B	
						Packaging 3 - 4 - B4B	
						Packaging 3 - 5 - B4B	
						Packaging 3 - 6 - B4B	
						Packaging 3 - 7 - B4B	
						Packaging 3 - 8 - B4B	
						Packaging 3 - 9 - B4B	
						Packaging 3 - 10 - B4B	
						Packaging 3 - 11 - B4B	
						Packaging 3 - 12 - B4B	
						Packaging 3 - 13 - B4B	
						Packaging 3 - 14 - B4B	
						Packaging 3 - 15 - B4B	
						Packaging 3 - 16 - B4B	
						Packaging 3 - 17 - B4B	
						Packaging 3 - 18 - B4B	
						Packaging 3 - 19 - B4B	
						Packaging 3 - 20 - B4B	
						Packaging 3 - 21 - B4B	
						Packaging 3 - 22 - B4B	
						Packaging 3 - 23 - B4B	
						Packaging 3 - 24 - B4B	
						Packaging 3 - 25 - B4B	
						Packaging 3 - 26 - B4B	
						Packaging 3 - 27 - B4B	
						Packaging 3 - 28 - B4B	
						Packaging 3 - 29 - B4B	
						Packaging 3 - 30 - B4B	
						Packaging 3 - 31 - B4B	
						Packaging 3 - 32 - B4B	
						Packaging 3 - 33 - B4B	
						Packaging 3 - 34 - B4B	
						Packaging 3 - 35 - B4B	
						Packaging 3 - 36 - B4B	
275	DC - 1 - B4B	1 pcs	8/16/19	0.00	0.00	DC - 1 - B4B	
						DC - 2 - B4B	
280	QC 21 - FG	1 pcs	8/16/19	0.00	0.00	QC 21 - FG - 21	
						QC 21 - FG - 70	
						QC 21 - SA - 53	

Smt
19/10/29

DAS
77
9-89
DAS
77
9-89

Part Op 110 - (CNC Alpha 160 Bender), Bend tube as per Dwg D206-667-243 using CNC bender program 206L-AF
Descriptions: 120 - (QC15- Crosstube Dimensional Check)
130 - ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: ***** 1-Drill pilot holes in tube using drill Jig DT8583 & DT8584 as per Dwg D206-667-243. Drill all (3) top holes. Holes facing inboard. Drill and Ream all holes in tube to finish size using drill Jig DT8583 & DT8584 as per Dwg D206-667-243 2- Drill fwd rivet holes using drill Jig DT8787 fwd as per Dwg D206-667-243. Note: FWD side has 3X top holes facing inboard. 3- C'sink holes as per dwg D206-667-243. Allow rivet to sit below surface to compensate for paint. 4- Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins. Drill ONLY 2 top holes ONLY plug most bottom hole to prevent accidental drilling. Drill holes and ream using drill Jig DT8583 & DT8584 as per Dwg D206-667-243. Drill only the top (2) holes. Drill & ream the top (2) holes to finish size using drill Jig DT8583 & DT8584 as per Dwg D206-667-243 5-Drill aft rivet holes using drill Jig DT8787 aft as per Dwg D206-667-243. Drill only the top (2) holes. 6- C'sink holes as per dwg D206-667-243. Allow rivet to sit below surface to compensate for paint. 7- Scribe tube to identify on the inner chamfer in the cuff D# and B# 8-*** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***Debur & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-243
135 - (Crosstubes Chemical Conversion), ***IMMEDIATELY AFTER GRINDING***
140 - (QC5- Inspect part completeness to step on W/O), *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***
142 - (QC7-Inspect Chemical Conversion Coat)

- 170 - (Outsource process - NDT per QSI038 4.1), *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Issue P/O: _____ LPI as per ASTM 1417
- 180 - (Receive & Inspect for Damage & Mat'l Certs), *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***
- 190 - (QC5- Inspect part completeness to step on W/O), *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Ensure results are as per Dwg D206-667-243
- 200 - (Spray Paint / NDT Room), *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** 2-Paint outside crosstube with White Imron as per QSI 005 4.2 PRIME: ~~PAINT 5189223~~ ~~Paint 5204428~~
- 210 - (QC14- Inspect Spray Paint), Wrap in plastic bag to protect from scratches
- 220 - INSTALL GROUNDING CLAMP AND SEAL WITH SIKAFLEX AS PER DWG 2-Install supports with Proseal 890 per D206-667-243 and QSI 015 3-Install supports clamps Using Dt9565 as per Dwg D206-667-243 ,Torque to 80-100 IN-LBS. 4-Install nut plates as per Dwg D206-667-243. Touch-up rivet heads with Imron paint.
- 240 - (QC5- Inspect part completeness to step on W/O), ***RE-CHECK TORCQUE ON CLAMP AFTER PROSEAL HAS CURED FOR 72HOURS AS PER DWG.***
- 260 - (QC4- 100% Inspect kits for completeness), ***VERIFY BY _____ BATCH # TO MATCH W/O
- 270 - (Identify as per dwg & Stock Location: ~~5103~~), Identify and pack for shipping as per PPP D206-667-203
- 275 - Photocopy bluefile and create labels as per PPP D206-667-203 CHG004
- 280 - (QC21- Final Inspection - Work Order Release)

5176610
ap 19/10

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D206-667-203TRN	Crosstube Turning Detail	1 pcs (1 ea)	110-Crosstubes - Bend - 1	144899
D2873-043	Nut Plate Assembly	2 pcs (2 ea)	220-Crosstubes - 4 - B4B	
D2873-045	Nut Plate Assembly	2 pcs (2 ea)	220-Crosstubes - 4 - B4B	
D2892-1	Support	2 pcs (2 ea)	220-Crosstubes - 4 - B4B	
D3595-063-450	Rubber Cushion 0.63" Wide X 4.50" Long	4 pcs (4 ea)	220-Crosstubes - 4 - B4B	
MS20601-AD4W10	Rivet	14 Ea (14 ea)	220-Crosstubes - 4 - B4B	
MS21920-22	Clamp	4 Ea (4 ea)	220-Crosstubes - 4 - B4B	
AN5-10A	Bolt	10 Ea (10 ea)	250-Packaging 1-1 - Pick Kit - B4B	5018077
AN5-32A	Bolt	4 Ea (4 ea)	250-Packaging 1-1 - Pick Kit - B4B	5018833x2 / 519858
AN5-34A	Bolt	4 Ea (4 ea)	250-Packaging 1-1 - Pick Kit - B4B	5019410
MS21042L5	Nut	4 Ea (4 ea)	250-Packaging 1-1 - Pick Kit - B4B	5150302
NAS1149D0563J	Washer	18 Ea (18 ea)	250-Packaging 1-1 - Pick Kit - B4B	5134647x16 / 5174280

519858
x2
5174280
x2

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Crosstubes - Bend - 1	D206-667-203TRN	1	4	0
220-Crosstubes - 4 - B4B	D2873-043 5186472	2	39	0
	D2873-045 5159206	2	32	0
	D2892-1 5196259	2	8	0
	D3595-063-450 5176511	4	63	0
	MS20601-AD4W10 5137192	14	74	0
	MS21920-22 5171289	4	75	0
250-Packaging 1-1 - Pick Kit - B4B	AN5-10A	10	82	0
	AN5-32A	4	277	0
	AN5-34A	4	41	0
	MS21042L5	4	401	0
	NAS1149D0563J	18	2,158	0

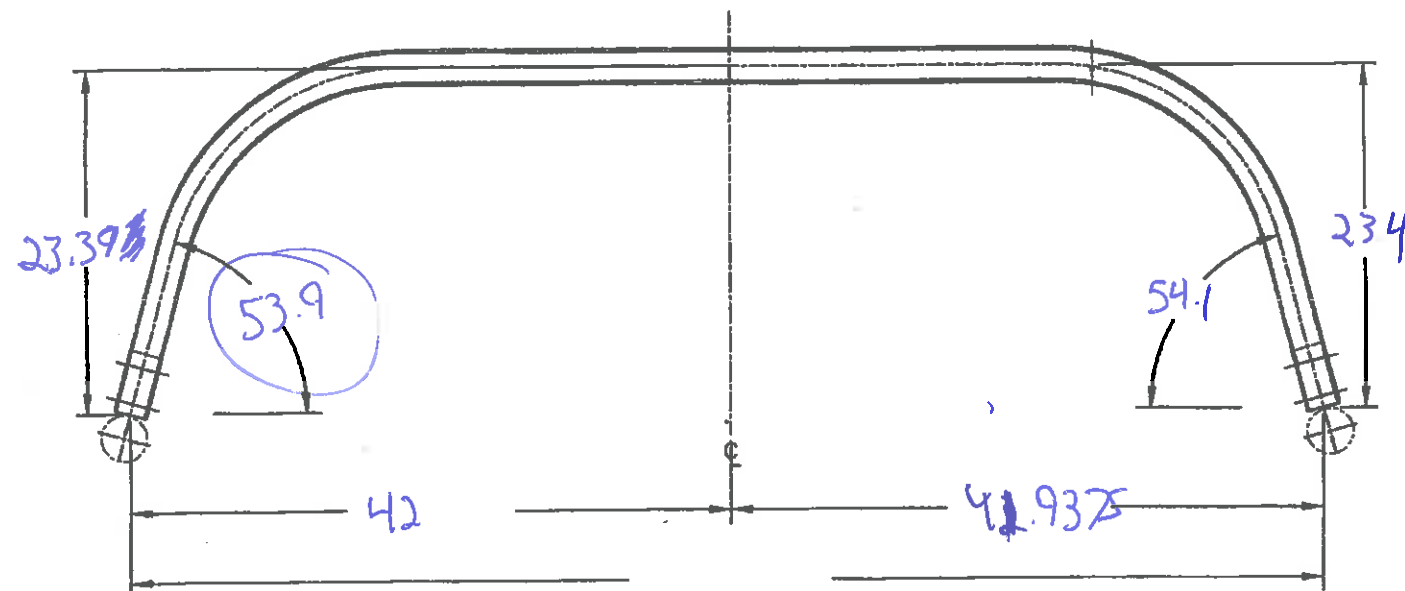
Part Specifications

Specifications could not be found.

Plex 7/15/19 3:48 PM Dart.lajeunesse.marie

DART AEROSPACE LTD	Work Order:	
Description: Crosstube High Aft (206L)	Part Number:	D206-667-203
Inspection Dwg: D206-667-243 Rev: C		Page 1 of 1

Required Dimension	Min	Max
Height	23.39	23.65
1/2 Span	41.79	42.05
Angle	54	56
Total Span	83.58	84.1
Bending Passes	8	—
Crushing	--	6%



2.117
2.310

	Side A	Side B
Bending Passes	8	8
Crushing	4.40%	4.50%
Comments		

2.115
2.315

QC15 Inspection	
Date	

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	09.11.17	Dwg Rev updated	KJ	
C	09.12.14	Dimensions update per Dwg Rev C	KJ	
D	12.04.16	Added bending, crushing dimensions	KJ	

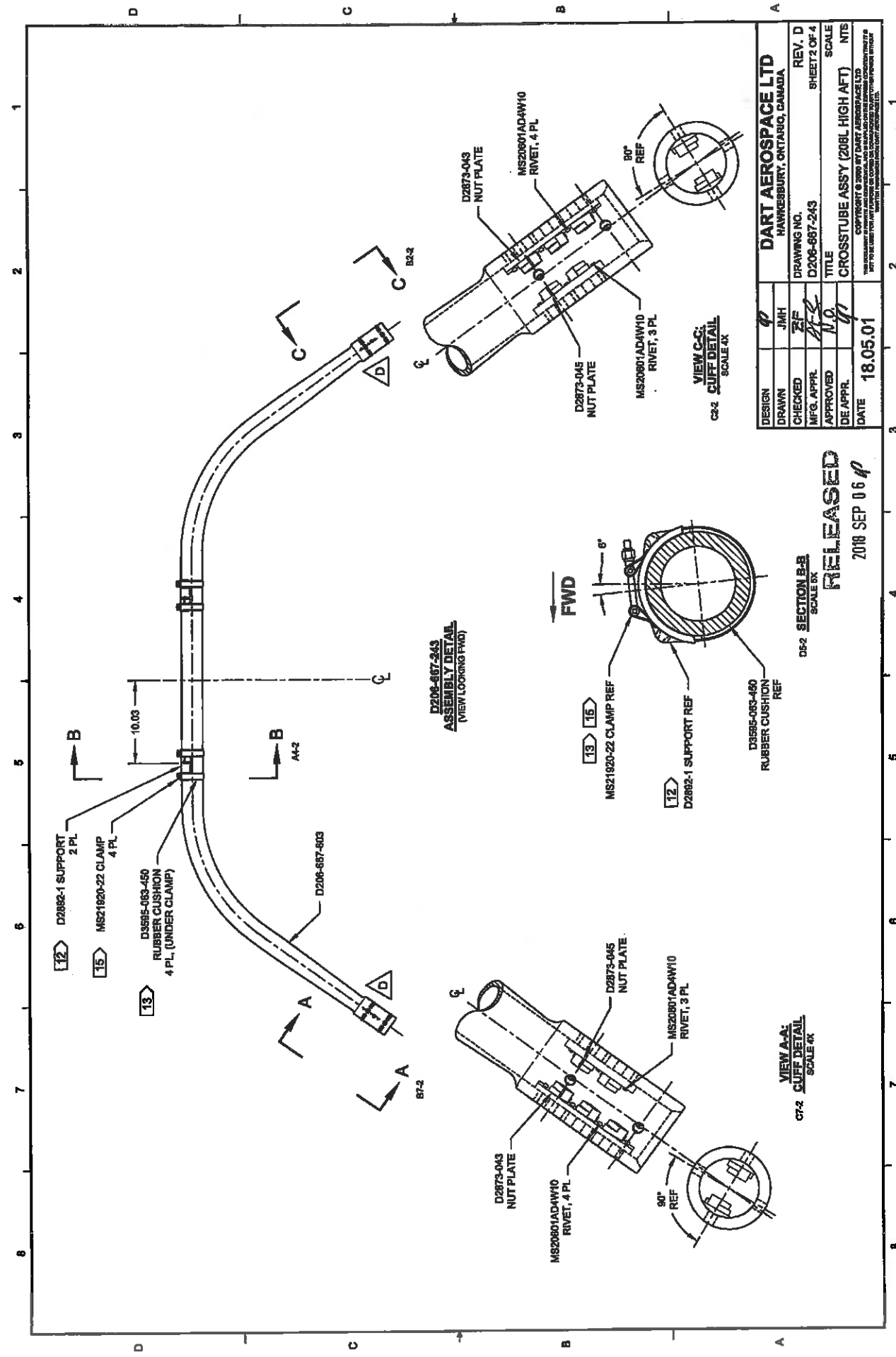
Item	Qty	Part Number	Description
	-243		
1	X	D208-887-243	CROSSTUBE ASSEMBLY (208L HIGH AFT)
2	1	D8004-115	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-045	NUT PLATE
5	2	D2882-1	SUPPORT
6	4	D3595-083-450	RUBBER CUSHION
7	4	MS21920-22	CLAMP
8	14	MS20801AD-4W10	RIVET (OR NAS8902B-4-10)
9	A/R	PROSEAL 880 B-2	SEALANT, AMS-S-8802 CLASS B-2

GENERAL NOTES:

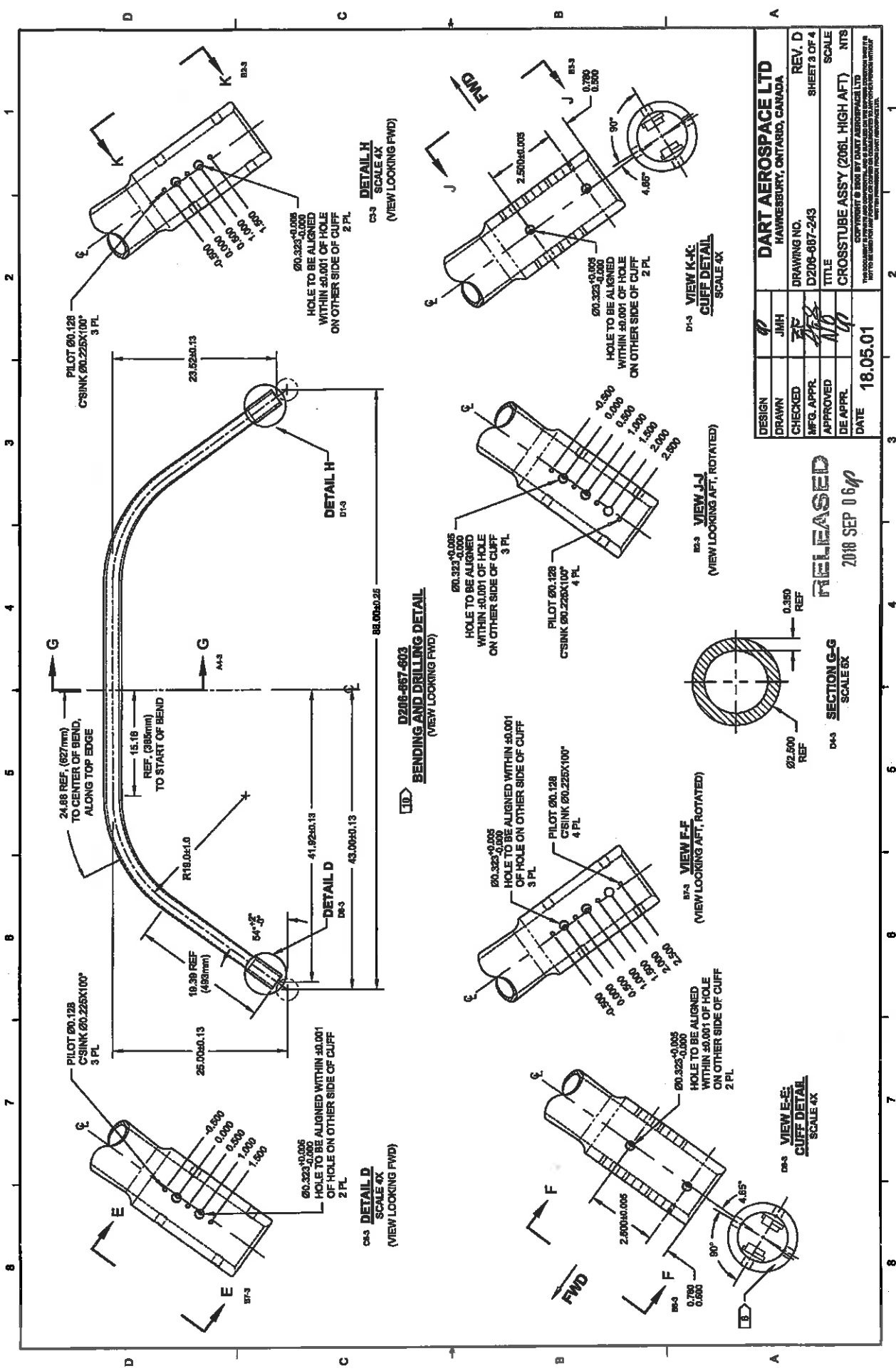
- 1) MATERIAL: MANUFACTURED FROM D6004-115
FINISHED LENGTH = 104.91±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER 'D208-887-243' AND BATCH NUMBER ON INSIDE OF CLIFF USING VIBRATING STYLUS.
- 7) WEIGHT: 24.8 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY, BENDING IS 6% BASED ON O.D.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 11) TO INSTALL D2882-1 SUPPORT: ABRASIVE MATING SURFACE OF SUPPORT AND CROSSTUBE 0.04" TO 0.07" THICK LAYER OF PROSEAL 880 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
- 12) INSTALL MS21920-22 CLAMPS WITH D3595-083-450 RUBBER CUSHIONS TO SECURE THE LOCATED ON CROSSTUBE SUPPORTS.
- 13) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 14) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 880 SEALANT HAS CURED FOR 72 HOURS.

D	REVISE SHEET 2 ASSEMBLY DETAIL HOLE PATTERN PER CAR16-221. UPDATE PARTS LIST AND GENERAL NOTES 12 & 15 TO INCORPORATE DEO C-1.	JMH	18.05.01
C	REVISE GENERAL NOTESPART LIST (ZN 07-1). REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS. D3695-083-450 WAS D2885-400-778 (ZN D6-2 & A5-2). REMOVED REF. & ADD TOLERANCES (ZN 4-4, CS-3, D3-3). RELOCATED FLAG #6 (ZN A5-3) PER NCR 210. MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4.	RF	08.11.08
B	ADD HOLES AND NUT PLATES FOR COMPATIBILITY WITH ENTIRE SKID TUBES	PH	05.07.28
A	NEW ISSUE	CP	00.11.17
REV.	DESCRIPTION	BY	DATE
DESIGN	JMH		
DRAWN	JMH		
CHECKED	JMH		
INFO. APPL.	JMH		
APPROVED	JMH		
DE APPL.	JMH		
DATE	18.05.01		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. D208-887-243			
SHEET 1 OF 4			
TITLE CROSSTUBE ASSY (208L HIGH AFT)			
SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS AVAILABLE TO THE PUBLIC WITHOUT RESTRICTION EXCEPT WHERE SHOWN OTHERWISE			

RELEASED
2018 SEP 05 09
2018-09-05 09:09



2018 SEP 06 *up*



DART AEROSPACE LTD KAMNERSBURY, ONTARIO, CANADA			
DESIGN	0	JMH	REV. D
DRAWN	0	JMH	SHEET 3 OF 4
CHECKED	0	JMH	DRAWING NO.
MFG. APPR.	0	JMH	D208-987-243
APPROVED	0	JMH	TITLE
DE APPR.	0	JMH	CROSSTUBE ASSY (206L HIGH AFT)
DATE	18.05.01		SCALE
			NTS

RELEASED
2018 SEP 06



PLEASE LEAD

PLEASE
2018 SEP 06



Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒		DEPARTMENT/PROCESS Cross tube ☒ Eng. (Non-AW) ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Finishing ☐ Rec/Store/Packaging ☐ Skid-tube ☐ Machining ☐ Large Fab ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date: 19/7/18	Sequence #: 120	QTY Affected: 1		MRB (QSI042) INSP 9/19/18 12 19/7/18			
Description Work Order Deviation		Disposition					
Angle is under tolerance by 0.1°		Acceptable					
Root Cause Operator ☐ Manufacturing Process ☒ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Other/Details: _____				Positioned Wrong ☐ Outside Tolerance ☒ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐	
		Completed By Lead hand / Supervisor JTW 19-08-18				QC / QA Coordinator SC 19/08/18	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB044239



Supplier: SKY002-VC Skyservice 6120 Midfield Road Mississauga ON L5P 1B1 Canada Phone: 905-678-5636 Fax: 905-678-5841	PO No: POHB044239 PO Date: 8/12/19 Due Date: 8/13/19 Purchase Order Revision: Revision Date: Ship-To Contact: Guerin, Kimberley Phone: 613-632-5200 Ext: 298 kguerin@dartaero.com
Attention: Jenne, Heather	Via: Ground Pynt Terms: Net 30 Freight Terms: Special Comments:
Ship To: 1270 Aberdeen Street Hawkesbury ON K6A 1K7 Canada Phone: 613-632-5200	

Items												
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price	
1	197937	D119-796-251	Aft Crosstube Installation With Step (No Hardware) : TC STC SH14-45-Issue 1, FAA STC SR03504NY 15/01/28, EASA STC 10052022 Revision 1 15/02/13, DGCA INDIA LoA 07-09/2011-AED (Part) 15/07/16, BRAZIL STC 2015S07-16 15/07/30, CAAP PHILIPPINES LoA 16/05/11, CHINA VSTC0757 16/07/22, RUSSIA STC CT316-A119 16/08/11, DGAC INDONESIA STC SR025 18/02/19 ISSUE P/O: *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** C OF C IS REQUIRED	Firmed	-	8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50	
	197938			Firmed	-	8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50	
Sub Total:							2	0	2		\$239.00	

IX AUG 13 2019

IX AUG 13 2019



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB044239



Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2	197723	D206-667-203	Aft Crosstube - High 206L / L1 / L3 / L4 : TC STC SH01-5 Issue 3, FAA STC SR01304NY 05/12/15, JCAB JAPAN STC-32-OSA 02/02/28, EASA STC EASA.IM.R.S.01179 06/07/03, BRAZIL 2009S08-16 09/08/25, BRAZIL 2009S08-17 09/08/25 (Outsource process - NDT per QSI038 4.1), *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Issue P/O: _____ LPI as per ASTM 1417	Firmed	-	8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50
	197724			Firmed	-	8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50
Sub Total:							2	0	2		\$239.00
3	197725	D206-667-201	Aft Crosstube - High 206 A/B : TC STC SH01-5 Issue 3, FAA STC SR01304NY 05/12/15, JCAB JAPAN STC-32-OSA 02/02/28, EASA STC EASA.IM.R.S.01179 06/07/03, BRAZIL 2009S08-16 09/08/25, BRAZIL 2009S08-17 09/08/25 (Outsource process - NDT per QSI038 4.1), *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***	Firmed	-	8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50
	197726			Firmed	-	8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50
Sub Total:							2	0	2		\$239.00
4	196763	D130-1048-041	H130/EC130 - Replacement Skidtube - Standard - LH : TC STC SH19-4 Issue 1, FAA STC SR04320NY dated 19/03/26 (Outsource process - NDT per QSI038 4.1), ISSUE P/O: _____ Liquid Penetrant Inspection as per QSI 038 LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order NDT C OF C IS REQUIRED	Firmed	-	8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50
	196762			Firmed	-	8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50
Sub Total:							2	0	2		\$239.00

DAS
40
9-89



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB044239



Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5	196766	D130-1048-042	H130/EC130 - Replacement Skidtube - Standard - RH : TC STC SH19-4 Issue 1, FAA STC SR04320NY dated 19/03/26 (Outsource process - NDT per QSI038 4.1), ISSUE P/O: Liquid Penetrant Inspection as per QSI 038 LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order NDT C OF C IS REQUIRED	Firmed -		8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50
	196767			Firmed -		8/13/19	1 pcs	0 pcs	1 pcs	\$119.50/pcs	\$119.50
Sub Total:							2	0	2		\$239.00

Grand Total: \$1,195.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/13/19 1:55 PM Dart.Guerin.Kimberley



Work Order Traveler
Sky Service F.B.O. Inc.

70105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO41392	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: POHB044239 ✓
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	

Task: UNSCHEDULED	Sequence: 1
-------------------	-------------

Work Required:

CARRY OUT NDT ON:

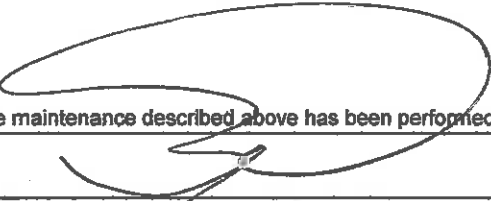
- ✓ 2 REPLACEMENT SKIDTUBE-STANDARD-LH , P/N: D130-1048-041 , J/S: 196762 , 196763
- ✓ 2 REPLACEMENT SKIDTUBE-STANDARD-RH , P/N: D130-1048-042 , J/S: 196766 , 196767
- ✓ 2 AFT CROSSTUBES , P/N D119-796-251 , J/S: 197937 , 197938
- ✓ 2 AFT CROSSTUBES , P/N: D206-667-203 , J/S: 197723 , 197724
- ✓ 2 AFT CROSSTUBES , P/N: D206-667-201 , J/S: 197725 , 197726

DAS
40
9-89

Action Taken:						Date:	Initial/Stamp:
LPI C/O IAW ASTM E-1417M-16 NO CRACK FOUND PEN. ZL-56, MPO13600, CLEANER SKC-S MPO13923 , DEV. MPO11715 , UV LIGHT M-20142						AUG 13 2019	 

Description	Location	P/N	Qty	Batch	S/N Off	S/N On

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature: 	ACA/SCA Stamp 	Date: AUG 13 2019
Name: RAFIK MELIKIAN		

Change Record

PAGE 1 OF 1

Part Number: D206-667-203/-203BL

Description: CROSSTUBE INSTALLATION, 206L/L1/L3/L4 HIGH AFT

[illegible]